

Interpretive Enhancements for Rota Route 100

The Commonwealth of the Northern Mariana Islands (CNMI), Department of Public Works (DPW) is implementing a \$3,000,000 road improvement project along approximately 12 km of Route 100, on the island of Rota. This 85-square-kilometer island has a population of about 3,500 and is one of the three main islands, along with Saipan and Tinian, in the CNMI archipelago. A primary paved road along the north coast connects the airport and two population centers of Sinapalu with Songsong village and the harbor. Route 100 is currently an unpaved secondary road providing an alternate connection between the villages. It traverses a variety of natural terrain, has many prehistoric and historic features along the alignment and is a potential tourist attraction. This project is being entirely funded through the Federal Highway Administration (FHWA) with Federal-aid Highway program, Emergency Relief and National Highway System funds.

A key challenge is to develop an innovative mitigation of impact strategy, which satisfies local permit requirements. The main permit for all CNMI development, including public infrastructure projects, is issued by the Coastal Resources Management Office (CRMO). This office obtains Major Siting Permit conditions from other local government agencies, significantly the historic preservation office (HPO). Rota is rich in cultural resources and the Route 100 project spans a 1,000-year time period with various sites. The FHWA, by performing a federal undertaking is required by the National Historic Preservation Act (NHPA) of 1966, as amended, to conduct a Section 106 review. In accordance with the law a memorandum of agreement was developed between the Hawaii Division and the CNMI HPO for this project. In consultation with HPO, the DPW Technical Services Division (TSD) has planned a suite of interpretive enhancements to be included in the project as part of the mitigation plan. These are to be placed at representative sites along the road, tied to interpretive centers and indexed on a key map of Rota.

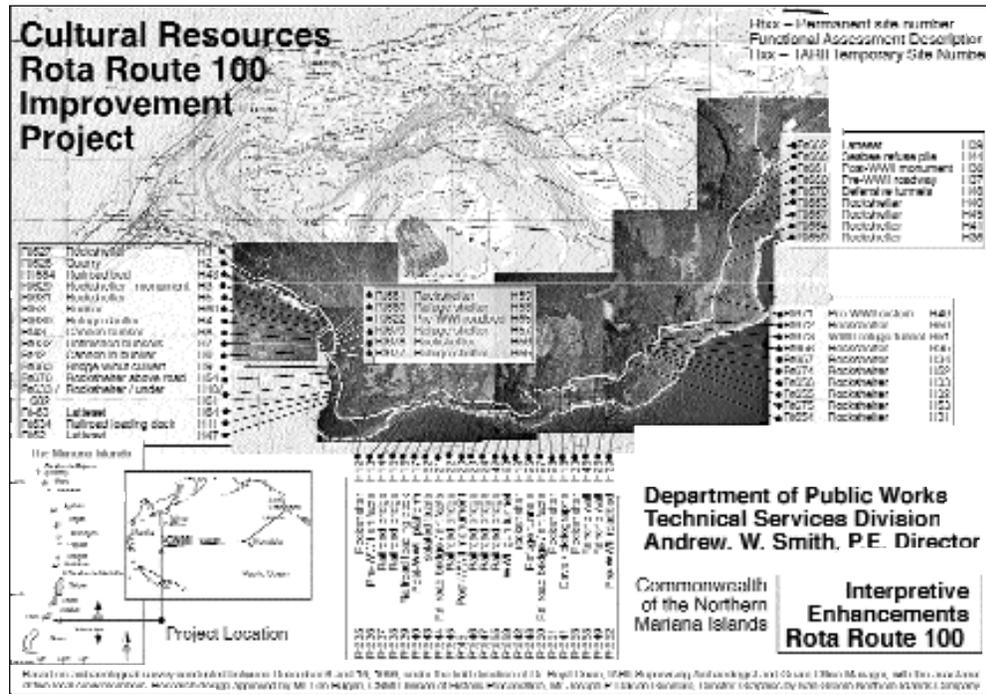
The 1,000-year historic period on Rota consists of the following:

- Late prehistoric (AD1000-1521) and proto-historic period (1521-1668); three disturbed *latte* sets and over 30 inland rock shelters suggesting a hunting and gathering focus;
- Spanish (1668-1898) and German (1898-1914) Colonial Period; in the Talakaya vicinity rice production and irrigation technologies for this subsistence crop not grown elsewhere in Micronesia or Polynesia;
- Japanese period (1914-1944) including World War II; transportation system developed by the Nanyo Kohatsu Kabushiki Company for sugarcane production, consisting of loading docks, cobble masonry bridges/culverts, and two narrow gauge locomotives; WWII defensive remains—one 120mm coastal defensive gun in a concrete bunker with one empty bunker nearby and a probable concrete ammunition storage bunker, interconnected rifle pits, and rock shelter tunnel complexes.

A secondary problem to overcome is providing a concise interpretation for a variety of historical periods, in an understandable and easily recognizable form, to the public.

Three main issues raised by these challenges relate to conveying the information sensitively, blending with the natural beauty of Rota, and meeting highway safety objectives. Planning elements for these improvements requires knowledge of the resources and the visitor and assessing the impact of the interpretive site.

Conveying information requires an awareness of the subject matter and the site location. One focus is to address historical improvements, not WWII losses, economic domination by colonial powers, or pre-contact ignorance of the outside world. Another sensitive issue is private property that abuts the roadway corridor. All of the sites and interpretive centers are on private land and have the potential to enhance the property but also could offend local landowners. Also, placing too many signs, and developing roadside pull-outs has the potential to create a negative impact



on the surrounding area. This impact has to be minimized but the message context must be broadly understood.

Blending in with the natural beauty of Rota is possible with low scale enhancements. They have a low visible impact but need to be clearly seen by drivers. They should not be incompatible with the surroundings.

A major concern with all road projects is highway safety. This cannot be compromised by obstructions or distractions. The Route 100 roadway in some areas is very steep with grades reaching 20% and narrow with cliffside cuts only one-lane wide. All of the historic cobble masonry bridges/culverts are narrow but short. To preserve these structures, guardrails are added and the road pavement is raised but the original structure remains. Scenic vistas at five locations will show off a biotic-geologic component of the island. Steep drop-offs occur frequently along the road and metal beam and concrete barrier guardrails are included in the project. Their placement can be too frequent, for both enhancements and standard roadside signs can obscure the view. Sight distance and visibility are necessary aspects of day and night driving.

Given the problems and issues, the interpretive enhancements include interpretive centers, signage, and printed brochures. These enhancements generally follow the historic period; Japanese transportation system and Japanese WWII defensive portions; colonial period; pre-

and proto-historic period; and scenic vistas. It is important to note that with Route 100, the road itself is a historical site since this was originally constructed as a narrow gauge railroad.

Interpretive centers will be placed at different locations along the road and in some cases off-site elsewhere on Rota. These will be at major focal points for the main five themes with detailed descriptions using colors and icons. Material must be able to withstand high ultraviolet sunlight, heavy concentrations of salt spray, typhoons, and vandalism, and be low maintenance.

Signage along the roads will have a minimal amount of text and key into the colors and icons at the interpretive centers. This includes a red locomotive, blue coast gun, green rice stalks, gray *latte* stone, and eye symbol.

Printed brochures will be placed at car rental agencies, hotels, government offices, and the Marianas' Visitors Association. Multilingual text is necessary for the predominately Asian Tourist. Foldout maps of Rota will be indexed for the roads, interpretive centers, sites, icons, and colors.